



Massachusetts Department of Environmental Protection

Bureau of Resource Protection – Water Supply – Water Quality Assurance/Water Treatment

BRP WS 34 Chemical Addition Retrofit for systems that serve less than or equal to 3,300 people

Instructions and Supporting Materials

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Introduction

DEP *Permit Applications*, as well as *Instructions & Support Materials*, are available for download from the DEP Web site at mass.gov/dep in two file formats: Microsoft Word™ and Adobe Acrobat PDF™. Either format allows documents to be printed.

Instructions & Support Materials files in Microsoft Word™ format contain a series of documents that provide guidance on how to prepare a permit application. Although we recommend that you print out the entire package, you may choose to print specific documents by selecting the appropriate page numbers for printing.

Permit Applications in Microsoft Word™ format must be downloaded separately. Users with Microsoft Word™ 97 or later may complete these forms electronically.

Permitting packages in Adobe Acrobat PDF™ format combine *Permit Applications* and *Instructions & Support Materials* in a single document. Adobe Acrobat PDF™ files may only be viewed and printed without alteration. *Permit Applications* in this format may not be completed electronically.



Massachusetts Department of Environmental Protection

Bureau of Resource Protection – Water Supply – Water Quality Assurance/Water Treatment

BRP WS 34 Chemical Addition Retrofit for systems that serve less than or equal to 3,300 people Permit Fact Sheet

1. What is the purpose of this permit?

This permit serves to protect the public's health and welfare by insuring that minimum drinking water requirements are met in the chemical addition retrofit of water systems. It consists of an approval for chemical addition retrofit of water systems, that serve 3,300 people or less. Legislative authority is stated in MGL Chapter 111, section 160A. Regulatory authority is stated in 310 CMR 22.04 of the Drinking Water Regulations.

2. Who must apply?

Public water suppliers or their representatives who want approval for the chemical addition retrofit of their water system.

3. What other requirements should be considered when applying for this permit?

If the water supplier or their representatives apply for this permit it may also be necessary for them to apply for other DEP water treatment permits, e.g. BRP WS 23 or BRP WS 24.

Note: These additional requirements are intended to serve as a guide to the applicant. It does not necessarily include all additional requirements.

4. What is the application fee?

The application fee is \$285.

5. What is the Primary Permit Location? What is the Reserve Copy Location?

Primary Permit Location:
Department of Environmental Protection
*Regional Office

Reserve Copy Location:
None Required.

Water Supply

*See "Addresses and Phone Numbers" page included in this package.

6. What are the timelines?

As of November 30, 1994 the timelines are:

| | AC | T1 | T2* |
|------------------|-----------|-----------|------------|
| BRP WS 34 | 30 | 60 | 60 |

*(A second technical review will only be conducted if necessary).

There is no public comment period for this permit.

7. What is the annual compliance fee?

There is no annual compliance assurance fee for this permit.



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BRP WS 34 Chemical Addition Retrofit for systems that serve less than or equal to 3,300 people
Permit Fact Sheet

8. How long is this permit in effect?

This permit is in effect as long as the applicant remains in compliance with appropriate laws and regulations and the Department determines that the product or operations continue to protect the public health and welfare.

9. How can I avoid the most common mistakes made in applying for this permit?

- a. Fill in all information on the DEP Application Form BRP WS Application.
- b. Attach all information requested on the Application Completeness Checklist.
- c. Send application and one copy of the DEP Transmittal Form to DEP Regional Office, Water Supply.
- d. Submit fee and one copy of the DEP Transmittal Form to: Department of Environmental Protection, P. O. Box 4062, Boston, MA 02211.

10. What are the regulations that apply to this permit? Where can I get copies?

These regulations include, but are not limited to:

- a. Drinking Water Regulations, 310 CMR 22.00
- b. Timely Action Schedule and Fee Provisions, 310 CMR 4.00.

These may be purchased at:

State Bookstore (in State House)
Room 116
Boston, MA 02133
617-727-2834

State Bookstore
436 Dwight Street, Room 102
Springfield, MA 01103-1317
413-784-1376



Massachusetts Department of Environmental Protection

Bureau of Resource Protection – Water Supply – Water Quality Assurance/Water Treatment

BRP WS 34 Chemical Addition Retrofit for systems that serve less than or equal to 3,300 people
Application Completeness Checklist

- ☐ The Transmittal Form is completed.
- ☐ Form BRP WS Application is completed.

The following should also be included:

- ☐ A cover letter explaining the request.
- ☐ Documentation to support the request.
- ☐ A DEP application for chemical addition retrofit.
- ☐ A Massachusetts Professional Engineer's Certification and dated stamp.

To submit the application package:

- ☐ Checklist items have been completed.
- ☐ Send one copy of the application along with one page from the DEP Transmittal Form to:

Department of Environmental Protection
* Regional Office

Water Supply

*See "DEP Addresses and Phone Numbers" for the addresses of DEP Regional Offices.

- ☐ Send fee of \$285 in the form of check or money order made payable to *Commonwealth of Massachusetts*, along with one copy of the DEP Transmittal Form to:

Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211



Massachusetts Department of Environmental Protection

Addresses and Phone Numbers

DEP Boston
One Winter Street
Boston, MA 02108
Telephone: (617) 292-5500
Fax: (617) 556-1049
TDD: (617) 574-6868

William X. Wall Experiment Station
37 Shattuck Street
Lawrence, MA 01843
Fax: (978) 688-0352
Division of Environmental Analysis
Telephone: (978) 682-5237
Air Quality Surveillance
Telephone: (978) 975-1138

Office of Watershed
Management
627 Main Street
Worcester, MA 01608
Telephone: (508) 792-7470
Fax: (508) 839-3469

Millbury Training Center
Route 20 Millbury, MA 01527
Telephone: (508) 368-5600
Fax: (508) 755-9253
Residuals Sludge Management
Telephone: (508) 368-5606
WWT Operator Certification
Telephone: (508) 368-5698

DEP Western Region
436 Dwight Street
Suite 402
Springfield, MA 01103
Phone: (413) 784-1100
Fax: (413) 784-1149



Adams
Agawam
Alford
Amherst
Ashfield
Becket
Belchertown
Bernardston
Blandford
Brimfield
Buckland
Charlemont
Cheshire
Chester
Chesterfield
Chicopee
Clarksburg

Colrain
Conway
Cummington
Dalton
Deerfield
Easthampton
East Longmeadow
Egremont
Erving
Florida
Gill
Goshen
Granby
Granville
Great Barrington
Greenfield
Hadley

Hampden
Hancock
Hatfield
Hawley
Heath
Hinsdale
Holland
Holyoke
Huntington
Lanesborough
Lee
Lenox
Leverett
Leyden
Longmeadow
Ludlow
Middlefield

Monroe
Montague
Monterey
Montgomery
Monson
Mount Washington
New Ashford
New Marlborough
New Salem
North Adams
Northampton
Northfield
Orange
Otis
Leyden
Palmer
Pelham
Peru

Pittsfield
Plainfield
Richmond
Rowe
Russell
Sandisfield
Savoy
Sheffield
Shelburne
Shutesbury
Southampton
South Hadley
Southwick
Springfield
Stockbridge
Sunderland
Tolland

Tyringham
Wales
Ware
Warwick
Washington
Wendell
Westfield
Westhampton
West Springfield
West Stockbridge
Whately
Wilbraham
Williamsburg
Williamstown
Windsor
Worthington

DEP Central Region
627 Main Street
Worcester, MA 01608
Phone: (508) 792-7650
Fax: (508) 792-7621
TDD: (508) 767-2788



Acton
Ashburnham
Ashby
Athol
Auburn
Ayer
Barre
Bellingham
Berlin
Blackstone
Bolton
Boxborough
Boylston
Brookfield

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Clinton
Douglas
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East Brookfield
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Harvard
Hardwick
Holden
Hopedale

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Hubbardston
Hudson
Holliston
Lancaster
Leicester
Leominster
Littleton
Lunenburg
Marlborough
Maynard
Medway
Mendon
Milford

Millbury
Millville
New Braintree
Northborough
Northbridge
North Brookfield
Oakham
Oxford
Paxton
Pepperell
Petersham
Phillipston
Princeton
Royalston

Rutland
Shirley
Shrewsbury
Southborough
Southbridge
Spencer
Sterling
Stow
Sturbridge
Sutton
Templeton
Townsend
Tyngsborough
Upton

Uxbridge
Warren
Webster
Westborough
West Boylston
West Brookfield
Westford
Westminster
Winchendon
Worcester

DEP Southeast Region
20 Riverside Drive
Lakeville, MA 02347
Phone: (508) 946-2700
Fax: (508) 947-6557
TDD: (508) 946-2795



Abington
Acushnet
Attleboro
Avon
Barnstable
Berkley
Bourne
Brewster
Bridgewater
Brockton
Carver
Chatham
Chilmark

Dartmouth
Dennis
Dighton
Duxbury
Eastham
East Bridgewater
Easton
Edgartown
Fairhaven
Fall River
Falmouth
Foxborough
Franklin

Freetown
Gay Head
Gosnold
Halifax
Hanover
Hanson
Harwich
Kingston
Lakeville
Mansfield
Marion
Marshfield
Mashpee

Mattapoisett
Middleborough
Nantucket
New Bedford
North Attleborough
Norton
Norwell
Oak Bluffs
Orleans
Pembroke
Plainville
Plymouth
Plympton

Provincetown
Raynham
Rehoboth
Rochester
Rockland
Sandwich
Scituate
Seekonk
Sharon
Somerset
Stoughton
Swansea
Taunton

Tisbury
Truro
Wareham
Wareham
Wellfleet
West Bridgewater
Westport
West Tisbury
Whitman
Wrentham
Yarmouth

DEP Northeast Region
1 Winter Street
Boston, MA 02108
Phone: (617) 654-6500
Fax: (617) 556-1049
TDD: (617) 574-6868



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Chelmsford
Chelsea
Cohasset
Concord
Danvers
Dedham
Dover
Dracut
Essex
Everett
Framingham
Georgetown
Gloucester
Groveland
Hamilton
Haverhill

Hingham
Holbrook
Hull
Ipswich
Lawrence
Lexington
Lincoln
Lowell
Lynn
Lynnfield
Malden
Manchester-By-The-Sea
Marblehead
Medfield
Medford
Melrose

Merrimac
Methuen
Middleton
Millis
Milton
Nahant
Natick
Needham
Newbury
Newburyport
Newton
Norfolk
North Andover
North Reading
Norwood
Peabody

Quincy
Randolph
Reading
Revere
Rockport
Rowley
Salem
Salisbury
Saugus
Sherborn
Somerville
Stoneham
Sudbury
Swampscott
Tewksbury
Topsfield

Wakefield
Walpole
Waltham
Watertown
Wayland
Wellesley
Wenham
West Newbury
Weston
Westwood
Weymouth
Wilmington
Winchester
Winthrop
Woburn



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Water Supply
BRP WS 34 Chemical Addition Retrofit
Application for Approval for Treatment of Public Water
Supply Systems That Serve Less Than or Equal to 3,300
People

Transmittal Number # _____

Facility ID (if known) _____

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Water Supply Information

1. _____
Name of Applicant – Board of Water Commissioners or similar body
2. _____
PWS I.D. #
3. _____
City/Town
4. _____
Total population served by systems (estimate if necessary)
5. _____
Other City, Town, District, Institution or Area served
6. _____
PWS I.D. #

B. Treatment Information

1. Sources of Water supply to be treated:

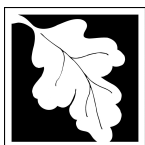
| | |
|-----------|----------|
| i _____ | ii _____ |
| iii _____ | iv _____ |

2. Treatment Type (See list A on next page):

3. Treatment Process (see list B on next page):

| | |
|----------------|-------------|
| _____ | _____ |
| Treatment Type | Code Number |

4. Chemicals to be used:



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Water Supply
BRP WS 34 Chemical Addition Retrofit
Application for Approval for Treatment of Public Water
Supply Systems That Serve Less Than or Equal to 3,300
People

Transmittal Number #

Facility ID (if known)

B. Treatment Information (cont.)

List A – Treatment Type

List B – Treatment Process and Code Numbers

| | | | |
|---------------------------------|---------------------------------|-------------------------------------|--|
| Disinfection By-Product Control | 100 Activated Alumina | 403 Gas.Chbriration - Pre | 600 Rapid Mix |
| Corrosion Control | 121 Activated Carbon (Granular) | 421 Hypochbrination - Post | 620 Reducing Agents |
| Disinfection Dechlorination | 125 Activated Carbon(Powder) | 423 Hypochlorination – Pre | 623 Reducing Agents – Sodium B sulfite |
| Iron Removal | 180 Algae Control | 443 Inhibitor – Bimetalic Phosphate | 625 Reducing Agents – Sodium Sulfite |
| Inorganic Removal | 180 Bone Char | 443 Inhibitor – Hexametaphosphate | 627 Reducing Agents – Sulfur Dioxide |
| Fluoridation | 200 Chloramines | 447 Inhibitor – Ortophosphate | 660 Reverse Osmosis |
| Manganese Removal | 220 Chlorine Dioxide | 447 Inhibitor – Polyphosphate | 680 Sedimentation |
| Organic Removal | 240 Coagulation | 449 Inhibitor – Silicate | 680 Sequestraton |
| Particulate Removal | 300 Distillation | 460 Ion Exchange | 700 Sludge Treatment |
| Radionuclides Removal | 320 Electrodialysis | 500 Lime - Soda Ash Addition | 720 Ultraviolet Radiation |
| Softening | 360 Flocculation | 520 Microscreening | 740 pH Adjustment |
| Taste/Odor Control | 380 Fluoridation | 560 Permaganate | 741 pH Adjustment - Post |
| | 401 Gas. Chlorination - Post | 580 Peroxide | 742 pH Adjustment - Pre |

C. Feed Points

| Feed Point(s) | Type of Feed Equipment | Flow Rate (GPM) | | Water Pressure | | Feeder Capacity | |
|---------------|------------------------|-----------------|-------|----------------|-------|-----------------|-------|
| | | Max. | Min. | Max. | Min. | Max. | Min. |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

D. Designer

1. Design Engineer:

2. Massachusetts Registration Number:



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Water Supply
BRP WS 34 Chemical Addition Retrofit
Application for Approval for Treatment of Public Water
Supply Systems That Serve Less Than or Equal to 3,300
People

Transmittal Number # _____

Facility ID (if known) _____

E. Certificate

The undersigned certify that the treatment facility will be operated under the supervision of the person named in Section F (or designated alternate) who will be in responsible charge of the operation, will comply with instructions and requirements of the Department of Environmental Protection, including those pertaining to maintenance of equipment, records and reports, performance of routine tests and submission of routine samples.

Name

Title

Signature

Date

It is understood that any change of assignment in Sections F or G must be reported promptly in writing to the Department of Environmental Protection

F. Employee in Responsible Charge of Treatment Facility

Name

Title

Certified Operator License Number

Grade

Signature

Date

Office Address

City/Town

State

Zip Code

Home Address

City/Town

State

Zip Code

Office Telephone Number

Home Telephone Number



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Water Supply
BRP WS 34 Chemical Addition Retrofit
Application for Approval for Treatment of Public Water
Supply Systems That Serve Less Than or Equal to 3,300
People

Transmittal Number # _____

Facility ID (if known) _____

G. Alternate Employee in Responsible Charge of Treatment

Name

Title

Certified Operator License Number

Grade

Signature

Date

Office Address

City/Town

State

Zip Code

Home Address

City/Town

State

Zip Code

Office Telephone Number

Home Telephone Number



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Drinking Water Program

BRP WS Application

For Water Supply Permits or Approvals

Transmittal Number _____

Facility ID# (if known) _____

A. Application

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Is this application for an ☐ Original or a ☐ Resubmittal?

2. Applicant:

Name _____

Address _____

City _____

State _____

Zip _____

Contact _____

Telephone _____

3. Consultant:

Name _____

Address _____

City _____

State _____

Zip _____

Contact _____

Telephone _____

B. Permit

Please check which permit or approval you are applying for:

Underground Injection Control

☐ BRP WS 06 Underground Injection Control Registration

Zone II Determination for Existing Sources

☐ BRP WS 07 Approval to Conduct Pump Test for Zone II Delineation

☐ BRP WS 08 Approval of Zone II Delineation

Cross Connection

☐ BRP WS 09 Plan Approval

New Technology

☐ BRP WS 11 Minor New Technology Approval; where no field test required
☐ Drinking Water Additive
☐ Cross Connection Device
☐ Water Vending Machine
☐ Other(specify): _____

☐ BRP WS 12 Major New Technology Approval: where field testing is required

☐ BRP WS 27 New Technology with Third-party Approval

☐ BRP WS 28 Vending Site/Source Prototype

☐ BRP WS 30 Vending Site Approval

☐ BRP WS 31 Vending and POU/POE Devices with Third-party Approval

New Source Approvals <70 gpm

☐ BRP WS 13 Exploratory Phase, Site Examination, Land Use Survey and Approval to Conduct Pumping Test

☐ BRP WS 15 Pumping Test Report Approval and Approval to Construct Source

New Source Approvals >70 gpm

☐ BRP WS 17 Exploratory Phase, Site Examination & Land Use Survey

☐ BRP WS 18 To Conduct Pumping Test

☐ BRP WS 19 Pumping Test Report Approval

☐ BRP WS 20 To Construct Source

Water Treatment Approvals

☐ BRP WS 21 To Conduct Pilot Study

☐ BRP WS 22 Pilot Study Report

☐ BRP WS 23 To Construct Facility <1 mgd

☐ BRP WS 24 To Construct Facility >1 mgd

☐ BRP WS 25 Treatment Facility Modification

☐ BRP WS 29 Water Treatment: Chemical Addition Retrofits of Water Systems > 3,300 people

☐ BRP WS 33 Distribution Modifications < 3,300 people

☐ BRP WS 34 Water Treatment: Chemical Addition Retrofits of Water Systems < 3,300 people

Water Quality Assurance

☐ BRP WS 26 Sale or Acquisition of Land for Water Source

☐ BRP WS 36 Abandonment of Water Source

Distribution System Modifications

☐ BRP WS 32 Systems > 3,300 people

☐ BRP WS 34 Systems < 3,300 people

C. Certification

"I certify, under penalty of law, that this application and all attachments were prepared under my supervision, in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted in this application, the information submitted is, to the best of my knowledge and belief, true, accurate and complete."

Print Name _____

Authorized Signature _____

Position/Title _____

Date _____